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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,536	07/11/2001	Torbjorn Albertsson	66291-320-5	6876
7.	590 05/30/2006		EXAM	INER
Eric J. Franklin			HANSEN, COLBY M	
Venable LLP Post Office Box	x 34385		ART UNIT	PAPER NUMBER
Washington, DC 20043-9998			3682	
			DATE MAILED: 05/30/2006	

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/902,536

Filing Date: July 11, 2001

Appellant(s): ALBERTSSON ET AL.

Eric J. Franklin, Reg. No. 37,134

For Appellant

**EXAMINER'S ANSWER** 

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This is in response to the appeal brief filed 5/1/2006 appealing from the Office action mailed 12/17/2003.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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# (8) Evidence Relied Upon

4,529,352	Suzuki et al.	7-1985
5,593,265	Kizer	1-1997
5,606,235	Mauletti	2-1997

### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following ground(s) of rejection are applicable to the appealed claims:

Claims 2-6 and 11 rejected under 35 U.S.C. 103. This rejection is set forth in a prior Office Action, mailed on 12/17/2003.

Claims 2-4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U.S. Pat. 4,529,352) in view of Mauletti (U.S. Pat. 5,606,235).

Suzuki et al. (U.S. Pat. 4,529,352) discloses an anthropomorphic manipulator, comprising an upper arm 13 which comprises a rear arm part (half of arm 13 farthest working tool 2) and which further comprises a front arm part (half of arm 13 nearest working tool 2) having a longitudinal axis, cabling 5 extending along the said arm parts, a supporting device 3a, 4 for guiding and holding the cabling in a stretched condition at the front arm part, the supporting device comprising a supporting arm 4 rotatably arranged on the rear arm part and an auxiliary arm arranged at the front arm part 3a.

However, Suzuki et al (US Pat. 4,529,35) does not disclose the rear arm being able to rotate about its longitudinal axis at an intermediate point.

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Mauletti (US Pat. 5,606,235) discloses an anthropomorphic manipulator with upper arm having a front portion 12 and rear portion 11 wherein the front arm part is journalled in bearings in the rear arm part for relative rotation a rear arm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the immediate rotating portion of the Mauletti (US Pat. 5,606,235) arm within Suzuki et al (US Pat. 4,529,35) so as to allow for increased position and degrees of freedom for the end effecter of Suzuki et al (US Pat. 4,529,35).

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. ('352) in view of Mauletti (US Pat. 5,606,235) as applied to claims 2-4 and 11 above, and further in view of Kizer (US Pat. 5,593,265).

Suzuki et al. ('352) discloses the claimed invention except for a spiral spring biaser for the support arm, or said spiral spring having a housing.

Kizer (US Pat. 5,593,265) discloses a spiral spring for biasing a support member relative to a base, said spiral spring housed in a container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the spiral spring of Kizer (US Pat. 5,593,265) within the supporting device of Suzuki et al. ('352) as an obvious variant to the leaf spring 36.

#### (10) Response to Argument

Applicant argues that Suzuki et al. (U.S. Pat. 4,529,352) does not disclose a "device for holding and stretching the cabling such that loosely hanging loops are avoided, and stretching the

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cabling such that it does not conflict with objects in the working range of the robot". Firstly, Examiner disagrees with applicant's assessment that Suzuki et al. (U.S. Pat. 4,529,352) does not disclose a device for holding and stretching the cabling while keeping the cabling out of the working range of the robot. Given the extremely broad and ubiquitous terminology of "holding" and "stretching", Suzuki et al. (U.S. Pat. 4,529,352) certainly discloses said properties during the normal use of the robot. Secondly, Examiner contends that nowhere within the claim language is the limitation set forth that the cabling mounted such as to avoid loosely hanging loops. As such, applicant's argument that Suzuki et al. (U.S. Pat. 4,529,352) is without said function is moot.

Applicant argues that Suzuki et al. (U.S. Pat. 4,529,352) is a completely different robot from that claimed by the applicant and therefore applicant's invention is novel. Examiner finds the robots of applicant and Suzuki et al. (U.S. Pat. 4,529,352) to be analogous, but concedes they do not function identically. That is why Examiner, upon receiving newly added claim 11 on 9/24/2003, changed the rejection to modify Suzuki et al. (U.S. Pat. 4,529,352) in view Mauletti (US Pat. 5,606,235). Therefore applicant's argument that applicant's invention is novel in view Suzuki et al. (U.S. Pat. 4,529,352) is moot, as the invention stands rejected (claims 11, and 2-4) under 35 U.S.C. 103 (a) Suzuki et al. (U.S. Pat. 4,529,352) in view of Mauletti (US Pat. 5,606,235).

Applicant argues that Suzuki et al. (U.S. Pat. 4,529,352) discloses a "slacked" holding of the cable and therefore does not fulfill the limitations set forth in claim 11. Examiner disagrees, as nowhere within claim 11 does it stipulate that the device for holding and stretching the cabling" cannot have slack. As such, applicant's argument has no basis upon the claim language or allowability.

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Finally, applicant argues that "the Examiner has failed to meet the burden set forth in MPEP 2141 for establishing a prima facie case of obviousness in concluding that the combined teachings of Suzuki et al. (U.S. Pat. 4,529,352) and Mauletti (US Pat. 5,606,235), teach or suggest each feature of claims 2-6 and 11". Examiner disagrees, for there is certainly not only a motivation to modify the analogous inventions Suzuki et al. (U.S. Pat. 4,529,352) by the teaching of Mauletti (US Pat. 5,606,235), but also the reasonable expectation of success.

Regarding the motivation to modify Suzuki et al. (U.S. Pat. 4,529,352) in view of Mauletti (US Pat. 5,606,235), it is the position of the Examiner that utilizing the structural relationship of Mauletti (US Pat. 5,606,235), that the upper arm has front 12 and rear 11 portions that are longitudinally rotatable relative to one another within Suzuki et al. (U.S. Pat. 4,529,352) would be obvious to give the end effecter (e.g. welder, gripper, probe, etc.) of Suzuki et al. (U.S. Pat. 4,529,352) increased freedom of movement and ability to work on a product with greater flexibility.

Regarding the reasonable expectation of success, it is the position of the examiner that Suzuki et al. (U.S. Pat. 4,529,352) and Mauletti (US Pat. 5,606,235) are analogous arts specifically pointing towards robotics that would be obvious to combine depending upon the motivation.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

Colby Hansen

Conferees:

Richard Ridley

David Fenstermacher M



# UNITED STATES DEPARTMENT OF COMMERCE

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CONTROL NO.

O9/902,536

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FIRST NAMED INVENTOR / PATENT IN REEXAMINATION ALBERTSSON 66291 - 320 - 5

EXAMINER HANSEN

ART UNIT 3682

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On August 18, 2005, Examiner filed a response with an incorrect date of December 29, 2004 attributed to the reply brief. The correct filling date of the reply brief is February 28, 2005. As a point of clarification Examiner recants the communication of August 18, 2005 and hereby acknowledges the receipt and entry of the reply brief of February 28, 2005.